

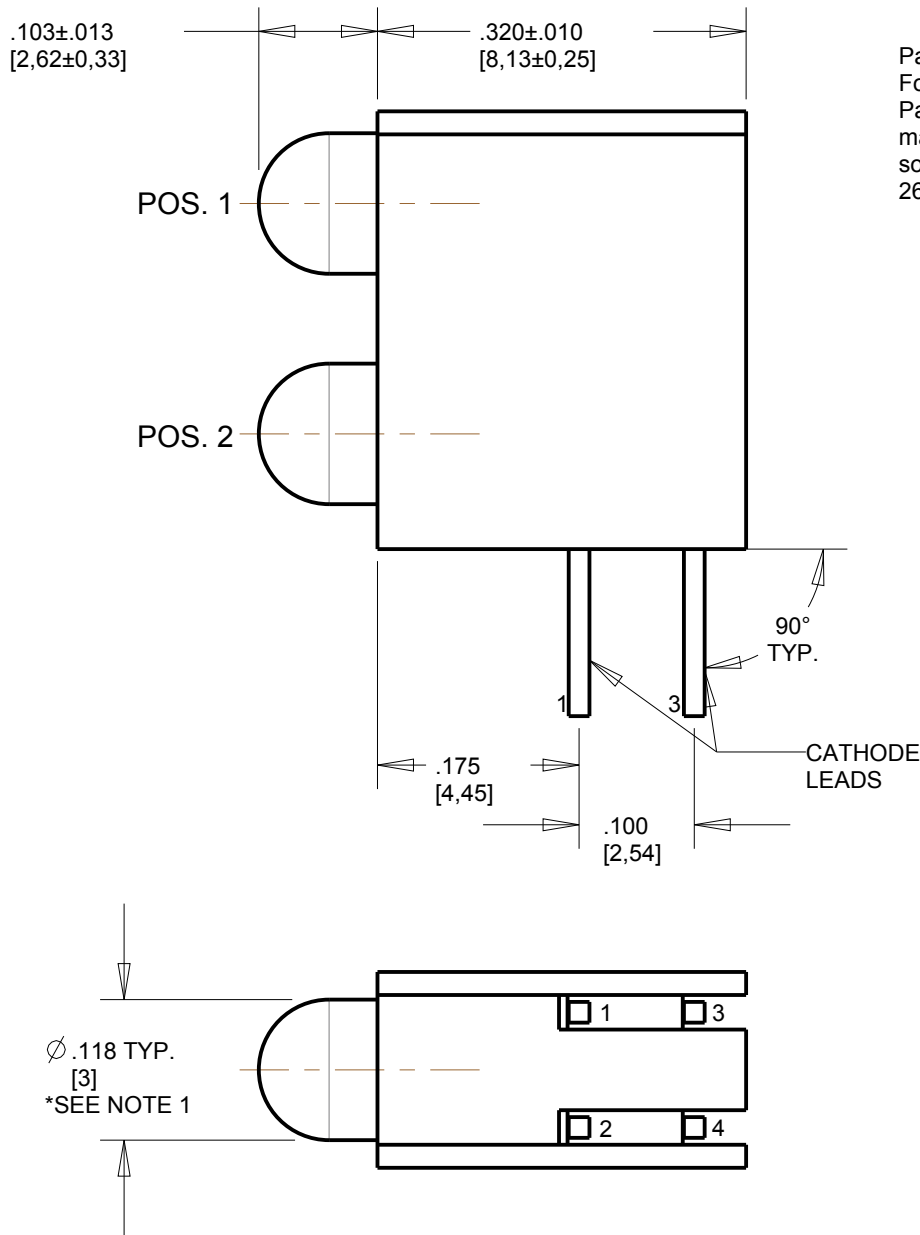
Technical drawing of a mechanical part, showing front and top views with dimensions in inches and millimeters.

Front View Dimensions:

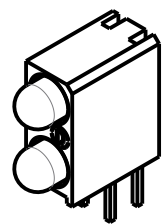
- Top width: $.170$ [4,32] MAX
- Top hole diameter: $\varnothing .100$ [2,54]
- Distance between hole centers: $.200$ [5,08]
- Bottom hole diameter: $\varnothing .100$ [2,54]
- Distance from top hole center to bottom hole center: $.380 \pm .010$ [9,65 $\pm$ 0,25]
- Distance from bottom hole center to base: $.145 \pm .010$ [3,68 $\pm$ 0,25]
- Base width: $.100$ [2,54]
- Base thickness: $.018 \times .016 \pm .003$ SQ NOM. TYP. *SEE NOTE 1

Top View Dimensions:

- Top hole diameter: $\varnothing .043 \pm .002$ [1,09 $\pm$ 0,05] TYP. *SEE NOTE 1
- Distance between hole centers: $.100 \pm .002$ [2,55 $\pm$ 0,05]
- Overall width: $.100 \pm .002$ [2,55 $\pm$ 0,05]



BIN	LIMITS (WHITE LED) (CHROMATICITY COORDINATES)				
A3	X	0.270	0.270	0.250	0.250
	Y	0.275	0.325	0.300	0.250
A4	X	0.270	0.250	0.250	0.270
	Y	0.275	0.250	0.200	0.225
B3	X	0.290	0.290	0.270	0.270
	Y	0.300	0.350	0.325	0.275
B4	X	0.290	0.270	0.270	0.290
	Y	0.300	0.275	0.225	0.250
C3	X	0.310	0.310	0.290	0.290
	Y	0.325	0.375	0.350	0.300
C4	X	0.310	0.290	0.290	0.310
	Y	0.325	0.300	0.250	0.275
D3	X	0.330	0.330	0.310	0.310
	Y	0.350	0.400	0.375	0.325
D4	X	0.330	0.310	0.310	0.330
	Y	0.350	0.325	0.275	0.300



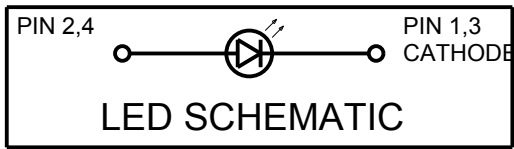
SCALE 2.000



ATTENTION:
OBSERVE PRECAUTIONS FOR
HANDLING ELECTROSTATIC
SENSITIVE DEVICES

NOTES:

1. (FOR ORANGE: LEADS .018 SQ. NOM.), LED BODY Ø. .115±.010 AND THE PC BOARD TOLERANCE ON LEAD THICKNESS TO BE ±.003.
2. LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
3. LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
4. PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
5. DIALIGHT PART NUMBERS: 553-0XXFX.
6. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.



553-01XXF						
OPERATING CHARACTERISTICS AT 25 °C AMBIENT: 10 mA LEDs						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	2.5	8.7	18	mcd	I _F = 10 mA
	YELLOW	1.7	5.6	—		
	GREEN	5.6	12.6	29		
	BLUE	11	16	23		I _F = 2 mA
	ORANGE	3.4	7.0	10.8		I _F = 10 mA
	WHITE	400	1100	1900		I _F = 20 mA
PEAK WAVELENGTH	RED		635		nm	
	YELLOW		588			
	GREEN		565			
	BLUE		468			
	ORANGE		600			
	WHITE					
DOMINANT WAVELENGTH	RED	615	625	632	nm	I _F = 10 mA
	YELLOW	585	590	595		
	GREEN	564	568	573		
	BLUE	460	467	475		
	ORANGE	597	602	616		
	WHITE					
FORWARD VOLTAGE	RED		2.0	2.6	V	I _F = 10 mA
	YELLOW		2.1	2.6		
	GREEN		2.1	2.6		
	BLUE	2.0	2.7	4.1		
	ORANGE	1.5	1.9	3.5		
	WHITE		3.5	4.0		I _F = 20 mA
REVERSE CURRENT	RED			100	μA	V _R = 5V
	YELLOW			100		
	GREEN			100		
	BLUE			10		
	ORANGE			100		
	WHITE			100		
VIEWING ANGLE	RED		60		DEGREE	
	YELLOW		60			
	GREEN		60			
	BLUE		100			
	ORANGE		60			
	WHITE		45			

553-03XXF						
OPERATING CHARACTERISTICS AT 25° C AMBIENT: 5 V INTEGRAL RESISTOR LEDs						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	8.7	29.0		mcd	V _F = 5V
	YELLOW	3.7	12.6			
	GREEN	5.6	19.0			
PEAK WAVELENGTH	RED		635		nm	
	YELLOW		585			
	GREEN		565			
FORWARD CURRENT	RED		10	20	mA	V _F = 5V
	YELLOW		10	20		
	GREEN		10	20		
REVERSE CURRENT	RED			100	μA	V _R = 5V
	YELLOW			100		
	GREEN			100		
VIEWING ANGLE	ALL		60		DEGREE	

553-03XXF				
ABSOLUTE MAXIMUM RATINGS AT 25° C AMBIENT 5 V INTEGRAL RESISTOR LEDs	COLOR			UNITS
	RED	GREEN	YELLOW	
CONTINUOUS FORWARD VOLTAGE	7.5			V
REVERSE VOLTAGE	5			V
LINEAR DERATING FROM 50° C	0.071			V/°C
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260			°C
OPERATING TEMPERATURE	-40 TO +85			°C
STORAGE TEMPERATURE	-55 TO +100			°C

553-01XXF							
ABSOLUTE MAXIMUM RATINGS AT 25° C AMBIENT	COLOR				ORANGE	WHITE	UNITS
	RED	YELLOW	GREEN	BLUE			
POWER DISSIPATION	100	60	120	120	135	120	mW
PEAK FORWARD CURRENT (1/5 DUTY CYCLE, 1 ms PULSE WIDTH) (1/10, .1mS FOR BLUE) (t< 10 μs D=.005 FOR ORANGE)	90	60	90	100	500	100	mA
CONTINUOUS FORWARD CURRENT	30	20	30	30	30	30	mA
LINEAR DERATING FROM 50° C (30° C FOR BLUE, 30° C FOR WHITE)	0.40	0.25	0.40	.5	0.50	.45	mA/° C
REVERSE VOLTAGE	5						V
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260						° C
OPERATING TEMPERATURE	-55 TO +100			-40 TO +85	-55 TO +100	-40 TO +85	° C
STORAGE TEMPERATURE	-55 TO +100			-55 TO +100	-55 TO +100	-40 TO +100	° C

553-02XXF						
OPERATING CHARACTERISTICS AT 25° C AMBIENT: 2 mA LOW CURRENT LEDs						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	0.75	2.5		mcd	I _F = 2 mA
	YELLOW	0.4	4.5			
	GREEN	0.4	1.1			
PEAK WAVELENGTH	RED		635		nm	
	YELLOW		585			
	GREEN		565			
FORWARD VOLTAGE	RED		1.7	2.2	V	I _F = 2 mA
	YELLOW		1.8	2.2		
	GREEN		1.9	2.2		
REVERSE CURRENT	ALL			10	μA	V _R = 5V
VIEWING ANGLE	ALL		60		DEGREE	

553-02XXF				
ABSOLUTE MAXIMUM RATINGS AT 25° C AMBIENT: 2 mA LOW CURRENT LEDs	COLOR			UNITS
	RED	GREEN	YELLOW	
POWER DISSIPATION	20			mW
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 0.1ms PULSE WIDTH)	500			mA
CONTINUOUS FORWARD CURRENT	7			mA
LINEAR DERATING FROM 95° C	0.7			mA/° C
REVERSE VOLTAGE	5			V
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260			° C
OPERATING TEMPERATURE	-55 TO +100			° C
STORAGE TEMPERATURE	-55 TO +100			° C

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SCALE: 6.000 ALL DIM'S IN: INCHES (MM) TOLERANCES: UNLESS OTHERWISE SPECIFIED FRACTIONS: $\pm 1/64$ DECIMALS (XX): $\pm .02$ DECIMALS (XXX): $\pm .015$ ANGLES: $\pm 3^\circ$ FINISH	DRAWING NUMBER C-17277 TITLE 3mm LED BI-LEVEL CBI RoHS COMPLIANT MATERIAL	REV K
ESCM: 83330		1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com